

WHAT IS CLAIMED IS:

Sub B1
1. A coloring agent amount recording apparatus recording an amount of a printing coloring agent, said apparatus comprising:

5 an information obtaining portion obtaining information on an amount of the printing coloring agent not used in actual printing; and

an information writing portion writing onto a recording medium the information on the amount obtained by said information
10 obtaining portion.

2. A coloring agent amount recording apparatus according to Claim 1,

wherein said recording medium is attached to a cartridge containing the printing coloring agent.

15 3. A coloring agent amount recording apparatus according to Claim 1,

wherein said printing coloring agent is ink or toner.

4. A coloring agent amount recording apparatus according to Claim 1,

20 wherein said amount not used in actual printing includes a residual amount of the printing coloring agent.

5. A coloring agent amount recording apparatus according to Claim 1,

wherein said amount not used in actual printing includes an amount of the printing coloring agent used when maintenance of a printing mechanism is carried out.

5 6. A coloring agent amount recording apparatus according to Claim 1,

wherein said information obtaining portion obtains the information on the amount not used in actual printing for each of the colors of the printing coloring agent, and

10 wherein said information writing portion writes onto the recording medium the information of each of the colors obtained by said information obtaining portion.

7. A coloring agent amount recording apparatus according to Claim 1, said apparatus being a part of a printing apparatus carrying out printing with the printing coloring agent.

15 8. A coloring agent materials cost processing apparatus processing a materials cost of a printing coloring agent, said apparatus comprising:

an information reading portion reading out information on an amount of the printing coloring agent not used in actual printing from a recording medium on which the information on the amount is written; and

20 a materials cost generating portion generating a materials cost of the amount based on the information on the amount read

out by said information reading portion.

9. A coloring agent materials cost processing apparatus according to Claim 8,

5 wherein said materials cost generating portion writes onto the recording medium information representing that materials cost processing has been completed when the materials cost is refunded to a user.

10 10. A coloring agent materials cost processing apparatus according to Claim 8, said apparatus comprising a materials cost recording portion recording the materials cost generated by said materials cost generating portion onto a predetermined target of recording.

11. A coloring agent materials cost processing apparatus according to Claim 10,

15 wherein said materials cost recording portion records the materials cost onto the target of recording so as to be associated with a user.

12. A coloring agent materials cost processing apparatus according to Claim 10,

20 wherein said materials cost recording portion records the materials cost onto the target of recording so as to be accumulated.

13. A coloring agent materials cost processing apparatus

according to Claim 10,

wherein said materials cost recording portion writes onto the recording medium information representing that materials cost processing has been completed when the materials cost is recorded onto the target of recording.

14. A coloring agent materials cost processing apparatus according to Claim 10,

wherein said target of recording is a portable card-type memory.

15. A coloring agent materials cost processing apparatus according to Claim 10,

wherein a storage content of said target of recording is accessible by a user through a network.

16. A coloring agent materials cost processing apparatus according to Claim 8,

wherein said recording medium is attached to a coloring agent cartridge containing the printing coloring agent.

17. A coloring agent materials cost processing apparatus according to Claim 8,

wherein said printing coloring agent is ink or toner.

18. A coloring agent materials cost processing apparatus according to Claim 8,

wherein said amount not used in actual printing includes

at least one of a residual amount of the printing coloring agent and an amount of the printing coloring agent used when maintenance of a printing mechanism is carried out.

19. A coloring agent materials cost processing apparatus
5 according to Claim 8,

wherein said materials cost is at least one selected from among the group consisting of a bonus to a user, a number of points analogous to cash, a voucher, a discount that the user receives when making a purchase, and a discount that the user
10 receives when receiving a service.

20. A coloring agent materials cost processing apparatus according to Claim 8,

wherein said information reading portion reads out, from a recording medium on which the information on the amount of
15 the printing coloring agent not used in actual printing is written for each of the colors, the information on the amount of each of the colors; and

wherein said materials cost generating portion generates the materials cost based on the information on the amount of
20 each of the colors read out by said information reading portion.

Sub B2
~~21. A coloring agent cartridge containing a printing coloring agent, said cartridge comprising a recording medium on which information on an amount of the printing coloring agent~~

Sub
B2
(Contd)

~~not used in actual printing is recorded.~~

22. A coloring agent cartridge collecting apparatus collecting a coloring agent cartridge, said apparatus comprising:

5 a coloring agent materials cost processing apparatus having an information reading portion reading out information on an amount of the printing coloring agent not used in actual printing from a recording medium on which the information on the amount is written, and a materials cost generating portion
10 generating a materials cost of the amount based on the information on the amount read out by said information reading portion; and

 a cartridge storage portion for collecting a coloring agent cartridge containing the printing coloring agent.

15 23. A transportation body for collection equipped with a coloring agent cartridge collecting apparatus,

 wherein said coloring agent cartridge collecting apparatus comprising:

 a coloring agent materials cost processing apparatus
20 having an information reading portion reading out information on an amount of the printing coloring agent not used in actual printing from a recording medium on which the information on the amount is written, and a materials cost generating portion

generating a materials cost of the amount based on the information on the amount read out by said information reading portion; and

5 a cartridge storage portion for collecting a coloring agent cartridge containing the printing coloring agent.

24. A method of collecting a coloring agent cartridge containing a printing coloring agent, said method comprising the step of:

10 (a) obtaining information on an amount of the printing coloring agent in the coloring agent cartridge, not used in actual printing; and

(b) generating a materials cost of the amount based on information on the amount.

15 25. A user interface used when a coloring agent cartridge containing a printing coloring agent is collected, said user interface comprising:

an identification information display portion for displaying identification information for identifying a user;

20 a materials cost display portion displaying a materials cost of an amount of the printing coloring agent not used in actual printing based on information on the amount; and

a materials cost accumulated total display portion displaying an accumulated total of the materials cost associated

with the identification information.

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